

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE

IN THE MATTER OF THE APPLICATION *
OF ARTESIAN WATER COMPANY, INC. *
FOR AUTHORITY TO INCREASE RATES *
AND CHARGES FOR WATER SERVICE *
(Filed April 11, 2015) *

PSC Docket No. 14- _____

**DIRECT TESTIMONY
OF
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ON BEHALF OF
ARTESIAN WATER COMPANY, INC.**

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1 **I. INTRODUCTION**

2 Q. **PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.**

3 A. My name is David L. Valcarenghi. I am Manager of Rates and Regulation for Artesian
4 Water Company, Inc. ("AWC" or the "Company") and my business address is 664
5 Churchmans Road, Newark, Delaware 19702.

6 Q. **ON WHOSE BEHALF HAS YOUR TESTIMONY BEEN PREPARED?**

7 A. My testimony has been prepared on behalf of AWC, which is a wholly-owned affiliate of
8 Artesian Resources Corporation.

9 Q. **PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE AND EDUCATIONAL**
10 **BACKGROUND.**

11 A. I commenced employment with AWC in March 2011. I am responsible for development
12 of revenue requirements sponsored by the Company, the administration of rates and
13 charges assessed by the Company and regulatory reporting. Before commencing
14 employment with AWC, I was employed by the Maryland Public Service Commission
15 for approximately 26 years. In that position, I was responsible for examining and
16 monitoring the financial health of utilities that conduct business in the State of Maryland,
17 which included the development and analysis of base rate revenue requirements, cost
18 recovery and regulatory reporting. I have testified on a number of occasions on issues
19 before the MdPSC. I hold a Bachelor of Arts degree in Economics from the University
20 of Maryland, Baltimore County and a Master of Science degree in Management with a
21 concentration in Financial Management from the University of Maryland, University
22 College.

1 **II. PURPOSE OF TESTIMONY**

2 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

3 A. The purpose of my testimony is to describe and support AWC's request to increase its
4 rates and charges for water service. I present financial data that shows the Company's
5 rates are presently insufficient to achieve a reasonable rate of return. The Company's
6 need for an increase is based on Test Year operating results for the twelve-month period
7 ended December 31, 2013 adjusted for known and measurable changes expected to occur
8 during a Test Period consisting of the twelve-month period ending September 30, 2014. I
9 sponsor the development of the revenue requirement, including various accounting
10 adjustments, which support AWC's request to increase rates for the opportunity to collect
11 an additional \$9,983,823 in annual water service revenues.

12 **Q. PLEASE SUMMARIZE AWC'S REQUESTED RATE INCREASE.**

13 A. AWC requests authority to implement revised rates that recover an additional \$9,983,823
14 in annual water service revenues and are based on a pro forma rate base of \$221,767,586,
15 adjusted operating income deficiency of \$5,990,873, and an overall rate of return of 8.40
16 percent, which incorporates a 10.90 percent return on equity. The development of
17 AWC's requested increase is reflected in a number of schedules appended to my direct
18 testimony. A summary of the requested revenue requirement is shown on Schedule
19 DLV-1. AWC witness Pauline Ahern describes and supports AWC's recommended
20 return on equity. The proposed increase in rates would produce a 15.91 percent increase
21 in revenue over revenues expected to be received from current base rates. The actual cost
22 impact of the proposed increase is less because the Public Service Commission ("PSC"
23 or "Commission") has permitted the Company to recover specific investments made in

1 infrastructure from customers through the assessment of a 3.32 percent Distribution
2 System Improvement Charge ("DSIC"). Since the DSIC rate is set to zero after
3 temporary rates are placed into effect, customers would experience an incremental
4 increase of 12.59 percent, the net of the overall 15.91 percent increase less the DSIC rate
5 of 3.32 percent.

6 **III. COMPONENTS OF RATE RELIEF**

7 **Q. PLEASE EXPLAIN HOW RATES HAVE BEEN DEVELOPED.**

8 A. AWC followed a typical rate base/rate of return approach in assessing the need for
9 additional revenues to support its operations. Stated differently, rates are set to provide
10 the Company an opportunity to recover prudently incurred costs, including taxes and
11 depreciation, plus a fair and reasonable return for investments that have been developed
12 to provide safe and reliable water service for customers. As indicated previously, the
13 components of AWC's requested rate relief are detailed on schedules appended to this
14 testimony.

15 **Q. WHAT IS THE SOURCE OF THE FINANCIAL INFORMATION PRESENTED** 16 **IN YOUR EXHIBITS?**

17 A. The information included in the Company's analysis is derived from AWC's books,
18 records and financial statements.

19 **Q. WHAT DATA WAS USED IN THE DEVELOPMENT OF THE PROPOSED** 20 **REVENUE REQUIREMENT?**

21 A. AWC utilized a Test Year consisting of the twelve-month period ended December 31,
22 2013 and a Test Period consisting of the twelve-month period ending September 30,
23 2014. The period ending September 2014 represents a period of 9 months after the

1 conclusion of the Test Year and thus satisfies the requirements set forth in the Minimum
2 Filing Requirements ("MFR"). Test Period financial projections are based on historic
3 operating results, as well as known and measurable changes in operations expected to
4 occur prior to the end of the Test Period.

5 Q. **HAS THE COMPANY COMPLIED WITH THE MINIMUM FILING**
6 **REQUIREMENTS IN THE DEVELOPMENT AND PRESENTATION OF**
7 **INFORMATION TO JUSTIFY A REVISION IN RATES?**

8 A. Yes. The Company's financial presentation includes all of the pertinent information in
9 accordance with the Minimum Filing Requirements of Title 26, Section 1002 of the
10 Delaware Administrative Code.

11 Q. **DID THE COMPANY PROVIDE PRIOR NOTICE OF ITS INTENT TO FILE**
12 **FOR REVISION OF ITS PRESENT RATES FOR WATER SERVICE?**

13 A. Yes. By letter dated September 10, 2013 addressed to Mr. Robert J. Howatt, Executive
14 Director of the Public Service Commission, AWC indicated that it would file for a
15 change in rates on April 1, 2014. On April 1, 2014 AWC sent another letter to Mr.
16 Howatt stating that the application for rate changes would be filed not later than end of
17 April 30, 2014. Copies of these letters are provided in DLV Exhibit 3.

18 Q. **PLEASE PROVIDE A DISCUSSION OF RATE RELIEF AWC HAS BEEN**
19 **AWARDED IN PRIOR RATE PROCEEDINGS.**

20 A. The Company most recently received authority to increase rates to collect an additional
21 \$6,250,000 in annual water service revenues pursuant to Commission Order 8097 in
22 Docket 11-207. The chart below identifies the financial results from AWC's three (3)
23 prior rate applications:

Docket No.	Filing Date	Decision Date	Increase Requested		Approved Increase	
			Dollars	Percent	Dollars	Percent
06-158	May-06	Dec-06	\$ 9,927,908	23.05%	\$ 6,000,000	14.00%
08-96	Apr-08	Sep-09	\$ 14,231,854	28.80%	\$ 7,340,592	14.70%
11-207	Apr-11	Dec-11	\$ 10,926,304	19.45%	\$ 6,250,000	11.13%

1
2 Q. PLEASE DISCUSS THE RESULTS FROM THE COMPANY'S LAST RATE
3 APPLICATION.

4 A. The Company's last rate application, Docket No. 11-207, was resolved through a
5 negotiated settlement that was approved by Commission Order No. 8097 on December
6 20, 2011. The approved settlement authorized AWC to implement rates to recover \$6.2
7 million in additional water service revenue and provides for a 10 percent return on equity.
8 No explicit pronouncements were made with respect to the Company's rate base or
9 operating income. Although not stated in the approved settlement, AWC's actual Rate
10 Base at the end of September 2011 was \$198,287,048. Through the end of the Test Year,
11 AWC's Rate Base has increased by only \$9,659,457 since September 30, 2011 while it
12 made \$20,500,000 in utility plant improvements over the same period. The reduction in
13 recoverable investment is achieved through the Company's strategic and effective use of
14 developer financing through Contributions in Aid of Construction as prescribed in PSC
15 Docket 15 and the use of specific federal tax allowances such as accelerated tax and
16 bonus depreciation provisions that reduce the Company's current actual tax burden.
17 Those savings are invested by AWC in infrastructure and reflected as a deduction from
18 rate base as a deferred tax. While those taxes are payable in future periods, the customer
19 enjoys the benefits of a reduced base upon which the Company would be permitted to
20 earn a fair rate of return until those amounts are actually paid.

1 Q. **DID YOU PREPARE EXHIBITS THAT SUPPORT AWC'S REQUEST TO**
2 **INCREASE ITS RATES AND CHARGES FOR WATER SERVICE?**

3 A. Yes. I developed two exhibits, which are appended to this testimony and marked as DLV
4 Exhibit 1 and DLV Exhibit 2. DLV Exhibit 1 provides the financial support for the
5 revenue request on 51 pages of schedules enumerated as Schedule DLV-1 through
6 Schedule DLV-6. Schedules DLV-2 through DLV-4 contains numerous supporting sub-
7 schedules. DLV Exhibit 2 is AWC's recommended water service tariff. A marked-up
8 version (changes underlined) is provided as DLV Exhibit 2a and a clean version is
9 provided as DLV Exhibit 2b.

10 Q. **PLEASE INDICATE THE RETURN LEVEL THAT HAS BEEN AUTHORIZED**
11 **FOR AWC.**

12 A. The settlement in Docket No. 11-207 afforded the Company the opportunity to earn a 10
13 percent rate of return on common equity, but provided no overall return complement.
14 Inserting the authorized 10 percent return on common equity into the Company's capital
15 structure from that case results in an overall calculated return of 7.91 percent.

16 Q. **HAS THE COMPANY BEEN ABLE TO ACHIEVE EARNINGS**
17 **COMMENSURATE WITH THOSE AUTHORIZED BY THE APPROVED**
18 **SETTLEMENT?**

19 A. No.

20 Q. **PLEASE INDICATE THE RETURNS THAT HAVE BEEN GENERATED BY**
21 **AWC'S OPERATIONS.**

22 A. Based on the twelve-month period ended December 31, 2013, AWC's operations
23 produced a ratemaking return of 6.59 percent, which is expected to decline to 5.70

1 percent by the conclusion of the Test Period. These returns demonstrate that the
2 Company has been unable to earn a return commensurate with its current authorized rate
3 of return of 7.91 percent, and the Company expects returns to decline through the end of
4 the Test Period ending September 30, 2014.

5 Q. **WHAT IS DRIVING THE NEED FOR ADDITIONAL REVENUES?**

6 A. AWC continues to spend significant amounts to rehabilitate and repair its sources of
7 supply, treatment facilities and distribution system through a variety of projects designed
8 to enhance the reliability of the network, and through a number of projects where AWC
9 has been requested to move its water mains. In addition to capital projects, AWC faces
10 ongoing and increasing cost pressure in the operation of its system due to higher
11 operating costs, including those related to labor, benefits, electricity and purchased
12 power, water quality testing and chemicals. AWC witness C. Thomas deLorimier
13 provides testimony that discusses projects that have either been completed since the
14 Company's last rate application or are presently underway and will be completed prior to
15 the end of the September 2014 Test Period.

16 Q. **PLEASE INDICATE THE DOLLARS THAT AWC HAS COMMITTED TO**
17 **REHABILITATING AND REPAIRING THE SYSTEM SINCE THE**
18 **CONCLUSION OF THE LAST CASE.**

19 A. Since the conclusion of Docket No. 11-207 (AWC's last rate proceeding), which included
20 capital investment through the Test Period ended September 30, 2011, AWC has invested
21 approximately \$20.5 million on a series of projects to rehabilitate and repair the system.
22 In addition to amounts already invested, AWC expects to invest another \$26.6 million on
23 a number of capital projects through the period that ends September 30, 2014.

1 Cumulatively, since the last rate case, AWC will have invested approximately \$47.1
2 million on infrastructure projects in a 36-month period to enhance and improve the
3 system.

4 Q. PLEASE INDICATE THE LEVEL OF RATE RELIEF THE COMPANY
5 REQUESTS IN THIS PROCEEDING.

6 A. AWC requests authority to collect an additional \$9,993,006 in additional annual water
7 service revenues from customers. The additional revenue is premised on the following
8 rate components:

9 Rate Base \$221,767,586

10 Operating Income \$12,631,899

11 Overall Rate of Return 8.40%

12 Q. PLEASE INDICATE HOW THE REQUESTED INCREASE IN WATER RATES
13 WILL IMPACT CUSTOMER BILLS.

14 A. Based on average consumption of 4,155 gallons per month, the proposed rates will
15 increase a typical residential customer's bill by \$5.80 per month from \$47.16 to \$52.96 or
16 an average of \$0.19 per day.

17 Q. WHAT PERIODIC DATA WAS USED TO DEVELOP THE REQUESTED RATE
18 RELIEF?

19 A. AWC's requested rate relief is premised on the financial results experienced during the
20 twelve-month period ended December 31, 2013, which is referred to as the Test Year. In
21 addition, AWC recommends adjustments based on conditions expected to occur during
22 the twelve month period ending September 30, 2014, which is referred to as the Test
23 Period.

1 Q. WHAT IS THE BASIS FOR PROJECTED PLANT DATA REFLECTED OR
2 CONTAINED IN THE DEVELOPMENT OF THE TEST PERIOD?

3 A. Projections of additional capital investment and retirements for the Test Period are based
4 upon open work orders that are expected to close prior to the end of September 2014 and
5 be rendered, used and useful in providing water service for customers.

6 A. Rate Base

7 Q. WHAT LEVEL OF RATE BASE WAS UTILIZED IN DETERMINING AWC'S
8 REQUESTED LEVEL OF RATE RELIEF?

9 A. AWC has calculated and requests that it be authorized to use a rate base of \$221,767,586
10 in assessing the need for additional revenues. The calculated pro forma rate base is
11 approximately \$23.5 million greater than the level reflected in AWC's last rate
12 application in Docket No. 11-207. The Company's requested rate base, in this
13 proceeding, reflects the net amount of investment used in providing service for customers
14 at the end of December 2013 and an additional \$25.2 million in net capital projects that
15 are anticipated to close by the end of September 30, 2014. Rate Base reflects the net of
16 accumulated investment costs less typical deductions such as Accumulated Depreciation,
17 Deferred Income Taxes and Contributions in Aid of Construction.

18 Q. DID YOU PREPARE A SCHEDULE THAT SHOWS THE COMPONENTS OF
19 RATE BASE UTILIZED IN THIS RATE APPLICATION?

20 A. Yes. Schedule DLV-2 shows the Company's calculation of rate base for the Test Year
21 and the Test Period.

22 Q. WHAT METHODOLOGY WAS USED TO DEVELOP RATE BASE
23 PROJECTIONS?

1 A. The Company's Test Period financial projections concerning capital additions and
2 retirements are based upon open work orders for all capital investment projects for utility
3 plant projects that will be completed prior to the end of the September 2014 Test Period.
4 It is helpful to examine separately the following components of the Company's rate base
5 projections: (1) used and useful utility plant (including separate consideration of supply
6 and treatment, transmission and distribution, and utility plant retirements); (2) intangible
7 assets; (3) accumulated depreciation; (4) contributions in aid of construction ("CIAC"),
8 advances for construction, deferred income taxes and deferred investment tax credits; (5)
9 accumulated depreciation on CIAC and advances; (6) materials and supplies; (7) cash
10 working capital; (8) taxes paid on CIAC; and (9) a summary of the aggregate impact of
11 factors (1) through (8).

12 1. Used and Useful Utility Plant

13 Q. REFERRING TO SCHEDULE 2, PLEASE EXPLAIN WHAT IS MEANT BY THE
14 PHRASE "USED AND USEFUL UTILITY PLANT."

15 A. Used and Useful Utility Plant refers to capital investments AWC has committed to
16 provide safe, secure, reliable water service to customers across all of our franchised areas.
17 The balance for the Test Year is derived from the Company's continuing property
18 records, and the balance for the Test Period is a projection of capital projects that will be
19 completed and placed into service prior to the close of the Test Period. AWC had a
20 balance of \$407,182,932 in utility investments at the end of the Test Year, which is
21 projected to increase to \$432,339,891 by the end of the Test Period.

22 Q. PLEASE DESCRIBE THE MOST SIGNIFICANT PLANT ADDITIONS
23 EXPECTED TO BE COMPLETED DURING THE TEST PERIOD.

1 A. The Company forecasts that \$26.6 million in additional capital investments will close
2 prior to the end of the Test Period. AWC witness C. Thomas deLorimier provides
3 testimony on the necessity for these capital projects. A list of the projected capital
4 spending is provided in CTD Exhibit 18 of Mr. de Lorimier's testimony. A summary of
5 the more significant items is provided below.

6 a. **Supply and Treatment**

7 From December 31, 2013 through the end of the Test Period, the Company will invest
8 approximately \$1.1 million in Source of Supply projects (Account No. 314), including
9 well replacement projects at Jefferson Farms, Llangollen and Fairwinds. The Company
10 intends to invest \$1.6 million for pump houses (Account No. 321), including \$1.4 million
11 for the Rt. 7 Booster Station. The Company also intends to invest approximately \$5.6
12 million for treatment plant upgrades (Account No. 331) including \$1.2 million for
13 upgrades at Castle Hills and \$3.0 million for upgrades at Llangollen related to 1,4
14 Dioxane removal and \$1.1 million for water purification projects (Account No. 332) The
15 necessity for these plant items is discussed more fully in the direct testimony of AWC
16 witness C. Thomas deLorimier in his direct testimony.

17 b. **Transmission and Distribution**

18 AWC plans to invest approximately \$11.0 million in improvements to its transmission
19 and distribution system (Account No. 343) during the Test Period. Of this investment,
20 which does not include developer financed projects, approximately \$2.5 million relates to
21 rehabilitation projects around Christiana Mall. This category also includes projects
22 stemming from the relocation of facilities due to government actions, such as highway

1 relocations. AWC witness C. Thomas deLorimier provides a further discussion of
2 enhancements to the Company's transmission system.

3 **c. Utility Plant Retirements**

4 Q. **WILL THERE BE ANY RETIREMENTS OF UTILITY PLANT DURING THE**
5 **TEST PERIOD?**

6 A. Yes. As shown on Schedule DLV-2A, AWC plans to retire \$1,468,865 in utility plant
7 during the Test Period. The retirements are deducted from the Company's calculation of
8 rate base.

9 Q. **HAVE THERE BEEN OTHER CHANGES IN THE COMPANY'S OPERATIONS**
10 **SINCE THE CONCLUSION OF THE LAST CASE?**

11 A. Yes. In October 2013, the Company placed in service a new billing system by Oracle
12 called Customer, Care and Billing ("CC&B"). This system replaced the PeopleSoft
13 Customer Information System ("CIS"). A conversion to CC&B was critically important
14 as the former system was designated as end of life, and thus only entitled the Company to
15 sustaining support. The exposure to the Company carried an unacceptable level of risk.
16 The conversion to CC&B required revisiting all major business processes from meter
17 reading to cash management in order to maximize the benefits of the increased
18 efficiencies available with the new system. The Company implemented business
19 processes within CC&B allowing greater transparency and improved monitoring of the
20 Company's to established policies and practices.

21 **2. Intangible Assets**

22 Q. **REFERRING AGAIN TO SCHEDULE DLV-2, PLEASE EXPLAIN THE**
23 **SECOND LINE'S REFERENCE TO "INTANGIBLE ASSETS."**

1 A. Intangible assets represent amounts paid by the Company to acquire franchises used to
2 serve customers across the state of Delaware. The balance for this category of assets for
3 the Test Year and Test Period is \$140,035 and is shown on Schedule DLV-2B.

4 3. Accumulated Depreciation

5 Q. PLEASE DESCRIBE OTHER RATE BASE ELEMENTS SHOWN ON
6 SCHEDULE 2.

7 A. Utility plant in service has been reduced by accumulated depreciation applicable to utility
8 property, which for the Test Period equals \$96,589,205. The pro forma balance includes
9 depreciation expense on projected capital investments and the cost of assets expected to
10 be retired through the end of the Test Period. Prior to the Company's last rate case, costs
11 associated with removing and/or salvaging utility assets were booked to Accumulated
12 Depreciation. In AWC's last rate case, the Company agreed to begin separately
13 accounting as a liability the costs of removing retired assets. An initial liability was
14 established on January 1, 2012 of \$1,085,758. The balance in the account is adjusted
15 monthly based on actual removal costs and the monthly allocation of the \$23,862 annual
16 allocation in accordance with the settlement. At the end of the Test Year, the retirement
17 liability account had a balance of \$982,510 and the Company projects a balance of
18 \$1,000,407 at the end of the Test Period. For presentation purposes, the retirement
19 liability has been included as an additional component of Accumulated Depreciation
20 which is deducted from Rate Base. The derivation of Test Year and Test Period
21 balances are provided on Schedule DLV-2C.

1 4. **Advances for Construction, Contributions in Aid**
2 **of Construction, Deferred Income Taxes and**
3 **Deferred Investment Tax Credits**

4 Q. **REFERRING TO SCHEDULE DLV-2, PLEASE EXPLAIN THE BALANCES**
5 **REFERRED TO AS CIAC, ADVANCES, DEFERRED INCOME TAXES AND**
6 **DEFERRED INVESTMENT TAX CREDITS.**

7 A. These elements, shown on lines 4 through 7 of Schedule DLV-2, are balances that are
8 deducted from rate base. Advances for Construction and Contributions in Aid of
9 Construction ("CIAC") represent amounts that are not funded by the Company and
10 therefore are deducted from rate base. Deferred Income Taxes and Deferred Investment
11 Tax Credits ("ITC") are balances that arise from timing differences or other special tax
12 policies. Here, the balances are contra accounts, meaning the balances are funded by
13 contributions from customers. The balance of Advances and CIAC for the Test Year and
14 Test Period are provided on Schedule DLV-2H. The balance of Deferred Income Taxes
15 is shown on Schedule DLV-2D; the balances for Deferred ITC are shown on Schedule
16 DLV-3L.

17 5. **Accumulated Depreciation on CIAC and**
18 **Advances**

19 Q. **PLEASE EXPLAIN THE NEXT TWO ITEMS, WHICH ARE ADDED TO RATE**
20 **BASE.**

21 A. As required by previous PSC policy, accumulated depreciation on Advances and CIAC,
22 shown at lines 7 and 8 of Schedule 2, has been added back to rate base. The balances
23 related to the Test Year and Test Period are shown on Schedule DLV-2H

24 6. **Materials and Supplies**

25 Q. **PLEASE EXPLAIN THE NEXT ITEM, MATERIALS AND SUPPLIES.**

1 A. This component reflects an addition to rate base and was determined through the use of
2 the thirteen-month average of the account balances for the 13 months ended December
3 31, 2013. Materials and Supplies represent a variety of components that are used in the
4 Company's operations. The calculation of Materials and Supplies is shown on Schedule
5 DLV-2G. The Company has seen no indication of unusual activity in the monthly
6 balances during the period.

7 **7. Cash Working Capital**

8 Q. **PLEASE EXPLAIN THE CASH WORKING CAPITAL COMPONENT OF RATE**
9 **BASE AND HOW IT WAS DEVELOPED.**

10 A. Cash Working Capital represents the net cash resources used by the Company to fund the
11 day to day operations of the water utility. AWC determined its cash working capital
12 requirement through the use of a lead/lag study that was applied to the expenses in the
13 Test Year and the proposed pro forma level of expenses consistent with the Test Period.
14 The working requirement for the Test Year and Test Period is reduced by the average
15 thirteen-month balances of security and customer deposits held by the Company. The
16 development of Cash Working Capital is shown on Schedule DLV-2E.

17 **8. Taxes Paid on CIAC**

18 Q. **PLEASE EXPLAIN THE ADJUSTMENT RELATING TO TAXES PAID IN**
19 **CONNECTION WITH CONTRIBUTIONS IN AID OF CONSTRUCTION.**

20 A. In Docket No. 87-15, the PSC ordered that when a utility pays the income tax expense
21 attributable to a contribution, the tax expense should be added to rate base. This
22 adjustment is made to recognize the additional income taxes paid as a result of the receipt
23 of new Contributions in Aid of Construction ("CIAC"). Federal income tax law
24 provisions that became effective June 13, 1996, eliminated the classification of CIAC,

1 specifically related to infrastructure intended to serve more than one customer, as taxable
2 income. However, CIAC related to service line extensions for the sole use of one
3 customer is still taxable. The Company has not recorded any new taxable CIAC since the
4 last rate application and does not project any in this application.

5 **9. Rate Base Summary**

6 Q. **PLEASE SUMMARIZE YOUR TESTIMONY WITH REGARD TO RATE BASE.**

7 A. AWC recommends the PSC utilize a rate base of \$221,767,586 consistent with the Test
8 Period that includes the twelve-month period ending September 30, 2014.

9 **B. Net Operating Income**

10 Q. **PLEASE EXPLAIN THE DEVELOPMENT OF NET OPERATING INCOME**
11 **USED AS A BASIS FOR RATE RELIEF IN THIS APPLICATION.**

12 A. The development of net operating income begins with net income for the Test Year and
13 reflects necessary adjustments that will occur during the Test Period. The Company
14 projects a decline in net operating income under present rates at the end of the Test
15 Period because the Company anticipates that increases in operating costs (including
16 operating and maintenance expenses), depreciation expenses, and taxes will not be fully
17 offset by a projected increase in operating revenues.

18 Q. **PLEASE DISCUSS THE PROJECTED INCREASE IN REVENUES FORECAST**
19 **DURING THE TEST PERIOD.**

20 A. The projected increase in operating revenues is attributable to an averaging technique
21 designed to normalize revenues from water sales experienced during the Test Year and
22 incremental sales revenue from customers expected to be added through the conclusion of
23 the Test Period.

24 Q. **PLEASE DISCUSS THE ADJUSTMENT TO NORMALIZE WATER SALES.**

1 A. The Company's pro forma Test Period projections for operating revenue under present
2 rates are based upon a billing analysis, which analyzed consumption by customer for
3 twelve-month periods ending December 31, 2011, December 31, 2012 and December 31,
4 2013. A simple three-year average for annual consumption was calculated for the same
5 period. This average was used as the basis for the consumption used in calculating gross
6 water sales revenues for each customer in the Test Period. A three-year averaging
7 approach was utilized to normalize sales because data for a five-year calculation was
8 unavailable as the Company converted from quarterly to monthly billing at the
9 conclusion of the last rate proceeding.

10 Where there was insufficient data to perform a three-year average or three years'
11 worth of consecutive data points were not available, the available data was used to
12 determine a projection. For example, if two years of data were available, a two-year
13 average was used. For new customers, or customers for whom the Company did not have
14 a full twelve-month period of consumption information, the average overall consumption
15 for the applicable customer class was used as projected consumption.

16 In addition, certain anomalies occurred within the measurement periods that
17 skewed the results of using a simple three-year average. Because the system aggregates
18 all bills during the measurement period it does not distinguish between bills that may
19 have been issued incorrectly and either reissued or corrected. Accordingly, the Company
20 employed a test to compare average results with the standard deviation of the customers'
21 test data. If the average differs, either higher or lower, from the standard deviation by
22 more than two times the standard deviation, then the monthly bill was adjusted to the

1 average of the rate class. Also if the calculated average is more than 50 percent above or
2 below actual consumption during the test year, the test year information was used.

3 Once the consumption for each customer was calculated, the Company calculated
4 how much, on average, each customer used in each period and in what rate block their
5 individual consumption would fall. The currently approved rates were applied to
6 determine revenues for minimum charges, for customer and fire protection, and for water
7 consumption.

8 Q. **PLEASE INDICATE HOW PROJECTIONS THAT FORM THE BASIS OF**
9 **ADJUSTMENTS IN OPERATING COSTS WERE DETERMINED.**

10 A. In general, Test Period financial projections of operating costs are based upon known and
11 measurable changes or items that can be reasonably expected to occur and are expected to
12 have an ongoing effect on the Company's operations.

13 Q. **PLEASE EXPLAIN SCHEDULE DLV-3-2.**

14 A. This schedule shows the Company's operating revenues and expenses by major expense
15 category for the Test Year and Test Period under both present and proposed rates.

16 Q. **REFERRING TO SCHEDULE DLV-3-2, PLEASE EXPLAIN THE TEST YEAR**
17 **DATA.**

18 A. This column shows per-book financial results experienced by AWC for the twelve
19 months ended December 2013. It details operating revenues, operating expenses, utility
20 operating income before income taxes, income taxes and utility operating income after
21 income taxes for the Test Year ended December 31, 2013.

22 Q. **WHAT DOES THE COLUMN PRO FORMA TEST PERIOD UNDER PRESENT**
23 **RATES INDICATE ON SCHEDULE DLV-3-2?**

1 A. On Schedule DLV-3-2, this column shows Test Year income and expenses, adjusted for
2 known and measurable changes expected to occur during the Test Period, to arrive at pro
3 forma operating income for the Test Period based on currently applicable rates and
4 charges.

5 Q **PLEASE EXPLAIN THE COLUMN FOR PRO FORMA TEST PERIOD UNDER**
6 **PROPOSED RATES FOUND ON SCHEDULE DLV-3-2.**

7 A The column shows Test Year income and expenses, adjusted for known and measurable
8 changes expected to occur during the Test Period, that are necessary for AWC to earn the
9 proposed overall rate of return of 8.40 percent.

10 **1. Operating Revenues**

11 Q **PLEASE EXPLAIN THE DEVELOPMENT OF OPERATING REVENUES.**

12 A. For the Twelve month period ended December 2013, AWC operations produced
13 \$60,849,520 in sales revenues and an additional \$1,433,819 from non-sale sources for
14 total operating revenues of \$62,283,339 for the Test Year. Test Year Operating
15 Revenues are increased by \$2,014,150 to derive Operating Revenues for the Test Period.

16 Q **PLEASE EXPLAIN THE ADJUSTMENT OF \$2,014,150 TO TEST YEAR**
17 **OPERATING REVENUE.**

18 A. Schedule DLV-3A-1 provides development of Test Year and Period Operating Revenue.
19 Two types of adjustments are applied to actual Test Year operating revenues to arrive at
20 pro forma Test Period revenues at current rates. During the Test Year, AWC received
21 \$60,849,520 from sales of water. The two adjustments made to actual Test Year
22 operating revenue are: (1) to normalize sales due to customers added or lost during the
23 Test Year; and (2) to account for additional customers that are expected to be added
24 during the Test Period.

1 As indicated earlier, the Company normalized Test Year Revenue received
2 through sales of water. The normalized revenue of \$62,482,951 represents the amount of
3 annual sales revenue the Company would earn under its present rate structure based upon
4 conditions that existed at the end of the Test Year, assuming average customer
5 consumption as adjusted. During the Test Year, customers were added or lost for which
6 a full year's revenues would not be reflected in actual Test Year operating revenues. The
7 adjustment of \$1,633,431 increases Test Year total sales of water to a level the Company
8 may have earned if all customers on the system at the end of the Test Year were billed for
9 their consumption for the entire Test Year using the adjusted average consumption used
10 in this application. The \$73,195 increase in Finance Charges represents an increase
11 proportionate to the normalized increase in water sales for the Test Year noted above.
12 Non-sales revenues, including those from Rentals, Contract Operations, and Other
13 sources, are increased by \$110,799 to derive Normalized Test Year Revenue. Other
14 Revenues represents the additional revenues expected to be realized by the Company
15 based on the Company's request to increase the charge for a Flow Test from \$300 to
16 \$600.

17 **Q. PLEASE EXPLAIN THE SECOND TYPE OF ADJUSTMENT, WHICH**
18 **INVOLVES THE ADDITION OF CUSTOMERS DURING THE TEST PERIOD.**

19 **A.** This adjustment reflects the additional customers expected to connect to the system
20 through the end of the Test Period. The \$269,365 increase in revenue represents the
21 revenue associated with the increase in customers through the end of the Test Period.
22 The additional revenue pursuant to growth represents revenues from the sale of water and
23 fire protection. The Company reflected additional customers based on annualized growth

1 of 1 percent in residential connections. This adjustment is designed to reflect additional
2 revenues with the new customers expected to be served during the Test Period and is
3 premised on the same averaging approach used in the Company's adjustment to reflect
4 normal revenues under present rates. The additional customers are expected to provide
5 additional water sales revenues of \$240,661 and fire protection revenues of \$28,704 for
6 the Test Period ending September 30, 2014. The increase of \$554 shown for Finance
7 Charge represents a proportionate increase in late fee charges assessed, directly related to
8 the increase in water sales revenue through the end of the Test Period. The adjustment is
9 based on a five-year average level of finance charges assessed as a percentage of gross
10 water sales.

11 Q. **PLEASE EXPLAIN THE ADJUSTMENT TO RENTAL INCOME AND**
12 **CONTRACT OPERATIONS.**

13 A. The Company has entered into a number of long-term use agreements with cellular phone
14 service providers for use of space on Artesian's various elevated storage tanks as the
15 location for their antennae. The adjustment annualizes revenues that will be realized from
16 agreements in place at the end of the Test Year. The adjustment to Contract Operations
17 represents annualized revenues pursuant to service agreements AWC has with a number
18 private and municipal water providers.

19 Q. **PLEASE EXPLAIN THE ADDITIONAL REVENUES SHOWN ON SCHEDULE**
20 **DLV-3-2 THAT ARE USED TO DERIVE PRO FORMA REVENUES UNDER**
21 **PROPOSED RATES.**

22 A. The \$9,983,823 represents the additional revenue requested by the Company to be
23 realized based on proposed rates and conditions that are expected to exist as of September

1 30, 2014 and in effect for a full year. The schedule not only reflects the added revenues
2 the proposed rates will generate, but notes the expected changes to finance charges, bad
3 debt expense, regulatory assessment and tax expense based on the additional operating
4 income resulting from those increased revenues.

5 Q. **HOW WERE THE ADDITIONAL REVENUES SHOWN IN THE SCHEDULE**
6 **DERIVED?**

7 A. The requested revenues are a function of the Company's proposed rate base, operating
8 income, rate of return, and conversion factor. The Company first determined the
9 proposed rate base. The proposed rate base was multiplied by the overall rate of return
10 requested in this application. The resulting amount was then reduced by adjusted utility
11 net operating income under present rates, which produced a deficiency of \$5,990,873.
12 That amount was then multiplied by the conversion factor shown on Schedule DLV-5,
13 which produces the pro forma revenue requirement of \$9,983,823. Finance charges, PSC
14 regulatory assessment, bad debt and income tax expenses were applied on a relative basis
15 to the increase in water sales revenue.

16 **2. Operating Expenses**

17 **a. Operation and Maintenance Expenses**

18 Q. **PLEASE EXPLAIN THE \$2,235,645 IN ADJUSTMENTS TO OPERATION AND**
19 **MAINTENANCE EXPENSES SHOWN ON SCHEDULE DLV-3-2, WHICH**
20 **PRODUCES PRO FORMA OPERATION AND MAINTENANCE EXPENSES**
21 **FOR THE TEST PERIOD UNDER PRESENT RATES.**

22 A. Operation and maintenance expenses were adjusted from \$31,881,977 to arrive at pro
23 forma expenses under present rates of \$34,217,622. A summary of the items that
24 produce the pro forma adjustment is shown on Schedule DLV-3B-1.

1 Q. PLEASE EXPLAIN THE ADJUSTMENTS TO OPERATING AND
2 MAINTENANCE EXPENSE IDENTIFIED ON SCHEDULE DLV-3B-1.

3 A. The prepared adjustments are normal ratemaking adjustments previously approved by the
4 Commission or adjustments that are based on known and measureable changes. The
5 normal ratemaking adjustments are identified by the first three adjustments shown on
6 Schedule 3-B-1, and are based on percentage calculations or reclassifications of "below
7 the line" expenses as operating expenditures. The remaining adjustments are designed to
8 reflect known and measurable changes that have already occurred in the Test Year but
9 have not been reflected in expense on an annualized basis or that are expected to occur
10 during the Test Period and therefore should be reflected in rates.

11 (1) Normal Rate Making Reclassification

12 Interest on Customer Deposits

13 Q. PLEASE EXPLAIN THE ADJUSTMENT RELATING TO INTEREST ON
14 CUSTOMER DEPOSITS.

15 A. The customer deposit interest adjustment of \$1,060 represents the annual interest expense
16 associated with the balance of customer deposits retained by the Company as authorized
17 in previous PSC rulings. Interest expense is generally charged "below the line," however
18 it is restated here as an operating expense for ratemaking purposes.

19 Charitable Donations

20 Q. PLEASE EXPLAIN THE NEXT ADJUSTMENT RELATING TO
21 RECLASSIFICATION OF DONATIONS AS AN OPERATING EXPENSE.

22 A. Annual donations to charitable organizations are recorded on AWC's books and records
23 in Account 426 as a "below-the-line" expense, but have been reclassified as an "above-

1 the-line" expense in this analysis consistent with previous rate proceedings. The
2 reclassifications are shown on DLV Schedule 3-F.

3 **Cost of Pool Operations**

4 Q. PLEASE EXPLAIN THE ADJUSTMENT FOR POOL COSTS.

5 A. This adjustment removes the annual costs of maintaining and operating the pool at
6 AWC's Newark location. The adjustment removes the labor and other associated
7 expenses that relate to the operation of the pool that are booked above the line for
8 financial statement purposes in order to reclassify those expenses below the line for
9 ratemaking purposes. Payroll associated with the provision of life guards has already
10 been eliminated in the recalculation of payroll expense found on Schedule 3C. In total,
11 pool expenses of \$6,082 have been eliminated from the Test Year operating income.

12 (2) **Adjustments for Known and Measurable**
13 **Changes**

14 **Payroll and Related Benefits**

15 Q. PLEASE EXPLAIN THE NEXT FOUR ADJUSTMENTS REFLECTED ON
16 SCHEDULE DLV-3B-1, WHICH RELATE TO INCREASES IN PAYROLL AND
17 EMPLOYEE BENEFIT EXPENSES.

18 A. The Company has projected payroll expenses to increase by \$899,703 through the end of
19 the Test Period. The increase in payroll expenses is the annualized result of employees
20 added and lost during the Test Year and the Test Period, annualized salary and wage
21 expenses incurred in the Test Year, and a projected 3 percent wage increase in base
22 salaries.

23 The next adjustment of \$180,104 reflects the increase in the annual pension
24 expense relating to the Company's Defined Contribution 401(k) plan. The adjustment is

1 premised on proposed changes in salary and wages through the end of the Test Period.
2 AWC does not maintain a Defined Benefit Pension Plan as a benefit for employees.

3 The next adjustment of \$739,183 reflects the increased cost of group insurance
4 benefits based on current premium rates and personnel. AWC has received notice that its
5 medical insurance premiums are expected to rise in the range of 8 percent to 15 percent
6 over premiums currently in effect when coverage is renewed in August 2014. For
7 ratemaking purposes, the Company utilized a conservative 10 percent increase in
8 developing a recommended adjustment for group insurance benefits.

9 The next adjustment reflects an increase of \$8,419 in workmen's compensation
10 insurance. This increased cost reflects an adjustment consistent with the number of
11 employees covered, and pro forma salary and wages.

12 **Q. PLEASE INDICATE HOW WAGES HAVE CHANGED SINCE THE LAST RATE**
13 **PROCEEDING.**

14 **A.** AWC has continued its efforts to control and reduce operating costs. Recently, AWC
15 hired an individual to act as the Company's central purchasing agent who specifically
16 focuses on identifying and implementing opportunities to reduce costs. AWC has also
17 furthered its Information Technology automation efforts and been able to reduce
18 Information Technology department personnel by four staff. Nonetheless, AWC has
19 experienced, and will continue to experience in the near term, increases in operating
20 costs, including those related to payroll and employee benefits. Between December 31,
21 2010 (the Test Year in Docket No. 11-207) and December 31, 2013 (the Test Year for
22 this rate application), total AWC operations and management [maintenance?] ("O&M")
23 payroll increased by only 2.99 percent. AWC had a full-time employee base of 213

1 positions at the end of December 2010 and 222 at the end of December 2013, an increase
2 of 9 total positions over the three year period. Through the end of the Test Period, AWC
3 will have added a number of operational positions, including electricians, positions in
4 pump maintenance and transmission and distribution ("T&D") personnel. These
5 positions are necessary to ensure the system is well-maintained and remains capable of
6 providing reliable service to customers. AWC has reduced overall employment within its
7 Information Technology department by 4 positions since its last rate filing.

8 **Q. PLEASE EXPLAIN WHY AWC'S LABOR-RELATED EXPENSES ARE**
9 **REASONABLE.**

10 **A.** AWC needs to retain a trained and experienced workforce to perform critical functions
11 across a complex integrated water system comprising multiple sources of supply with
12 varying water characteristics and treatment technology requirements with water
13 distributed through ten distinct service levels. It is AWC's responsibility to ensure
14 customers receive high-quality water and reliable service. In order to attract and retain
15 qualified personnel capable of meeting this responsibility, AWC must be able to offer
16 competitive wages and benefits. To ensure that AWC's employee wages remain
17 competitive, an independent compensation study commissioned by AWC's
18 Compensation Committee of the Board of Director's (the "Committee") was recently
19 conducted. The Committee, made up of entirely independent Director's (as defined by
20 NASDAQ), sifted through 11 potential consulting firms, choosing a firm which met
21 specific criteria including that they were certified as independent from any business or
22 personal relationship with any member of the Company's management or Board of
23 Directors. The successful bidder conducted two separate studies reviewing the pay and

1 wage levels of executives and, separately, other operational personnel over the course of
2 approximately nine months. The Consultant, after reviewing the study concluded that the
3 Company's current levels of pay and wages were appropriate.

4 AWC's payroll expense increased at a smaller rate than employee wages
5 increases for other area businesses. Data from the U.S. Bureau of Labor Statistics
6 indicates Delaware non-farm wages (excluding employee benefit costs) increased 3.9
7 percent during the last 3 years and wages associated with Trade, Transportation and
8 Utilities increased 4.7 percent. As indicated earlier, AWC O&M wages have increased
9 2.99 percent during the three-year period from December 31, 2010 to December 31,
10 2013.

11 In the current case, AWC is seeking to include pro forma O&M payroll and
12 benefits costs of \$19,416,646 for the period ending September 30, 2014. This level is
13 approximately \$1.5 million greater than the September 30, 2011 pro forma O&M payroll
14 and benefits costs, which includes pension, medical insurance premiums and other
15 benefit components that were included in Docket No. 11-207 and thus represents an
16 increase of 8.3 percent or 2.7 percent per annum. When considering the significant cost
17 pressures AWC continuously faces with regard to employment compensation expenses,
18 especially in the area of rising medical insurance costs, the level of pro forma payroll and
19 benefit costs included for the Test Period ending September 30, 2014 are both fair and
20 reasonable.

21 **Purchased Power Costs**

22 Q. PLEASE EXPLAIN THE ADJUSTMENT FOR INCREASED PURCHASED
23 POWER COSTS.

1 A. This adjustment annualizes recent rate changes afforded to Delmarva Power & Light
2 Company, the Company's distributor of electric energy, and annualized changes for
3 purchases from the Company's electric energy commodity provider, Direct Energy. The
4 adjustment, shown on Schedule DLV-3B-2, produces an increase in Operation and
5 Maintenance expenses of \$36,400.

6 **Chemical Costs**

7 **Q. PLEASE EXPLAIN THE NEXT ADJUSTMENT FOR CHEMICAL COSTS.**

8 A. The Company solicits bids for the majority of chemicals that are used in operations. This
9 adjustment annualizes chemical costs based on the volume of chemicals used in the Test
10 Year at current bid prices. The adjustment, shown on Schedule DLV-3B-3 decreases
11 Operating and Maintenance expenses by \$16.

12 **Chester Legal Costs**

13 **Q. PLEASE EXPLAIN THE ADJUSTMENT FOR CHESTER LEGAL COSTS.**

14 A. AWC has a multi-year contract with the Chester Water Authority ("Chester") that
15 requires the Company to pay for at least a certain minimum volume of purchased water
16 on an annual basis. The Company pursued litigation against Chester in 2010 alleging that
17 the price charged by Chester for purchased water was excessive and demanded relief.
18 AWC has incurred significant costs in this challenge against Chester. The prepared
19 adjustment removes costs related to this litigation booked to operating income during the
20 Test Year and amortizes the total legal costs related to the Chester litigation over the 7
21 remaining years of the contract. This adjustment is shown on Schedule DLV 3-B-4.

22 **Q. PLEASE EXPLAIN AWC'S STRATEGY FOR MITIGATING PURCHASED**
23 **WATER COSTS FROM CHESTER.**

1 A. AWC's annual purchased water expense associated with the Chester Water Authority
2 interconnection was \$2,750,688 in 2007. Chester notified the Company that it would
3 raise its rates some 27% over the next three years. Previously, Chester had increased its
4 rates modestly with increases amounting to less than 2% annually. AWC retained experts
5 to analyze Chester's cost of service, which is the basis for the rates and charges assessed
6 by Chester, and concluded that the rate assessed by Chester to AWC was excessive.
7 AWC experts developed an alternative cost of service and concluded the rates for service
8 needed to be reduced. But Chester Water is and remains an unregulated, quasi-
9 governmental agency that sets rates based on management recommendations to its
10 independent board of directors. From the time Artesian received the notice in 2007, the
11 Company made a concerted effort through the use of independent consultants to
12 understand the need for the increase and made extensive efforts to negotiate amicably
13 with Chester Water for equitable relief from the increase. In 2010, after all efforts were
14 exhausted, AWC instituted the only remaining option it had at its disposal, a lawsuit
15 against the Chester Water Authority challenging the rate assigned by Chester as excessive
16 and seeking relief on behalf of AWC's customers. Accordingly, in 2010, AWC instituted a
17 lawsuit against Chester in Federal Court of the Eastern District of Pennsylvania with the
18 aim of reducing the rate assessed by Chester for purchased water. The case was tried
19 before a Special Master appointed by a federal court judge. In August 2013, the Special
20 Master provided his recommendation to the Judge. AWC has filed exceptions to the
21 Special Master's report and awaits a decision from the federal court judge.

22 Q. **PLEASE DETAIL THE COSTS INCURRED BY AWC WITH REGARD TO THE**
23 **CHESTER LAWSUIT.**

1 A. AWC has incurred approximately \$1.6 million in costs, including \$813,304 during the
2 Test Year, in its pursuit to reduce the cost of purchased water charged to the Company by
3 Chester. The costs incurred are for analyses prepared by outside experts retained by
4 AWC and for legal services provided by counsel retained specifically for the Chester
5 litigation.

6 Q. **WHY SHOULD AWC BE AUTHORIZED TO RECOVER LEGAL COSTS**
7 **ARISING FROM THE CHESTER LAWSUIT?**

8 A. AWC challenged the excessive costs charged by Chester so customers would not be
9 unfairly burdened. The recovery of litigation costs should not be conditioned on whether
10 the outcome is successful. The Commission should empower utilities to take all
11 reasonable steps to reduce costs. The Company felt it had a responsibility to mitigate the
12 excessive nature of costs assessed to AWC by Chester. Absent rate recovery of the legal
13 costs incurred, the Company would be disincentivized from undertaking similar efforts in
14 the future to mitigate costs on behalf of customers.

15 **Purchased Water**

16 Q. **PLEASE EXPLAIN THE NEXT ADJUSTMENT FOR PURCHASED WATER**
17 **EXPENSE.**

18 A. This adjustment reflects the increased costs of purchased water arising from a projected
19 10 percent increase in the rates assessed by the Chester Water Authority that are expected
20 to occur on or about July 1, 2014 for water purchased under existing take or pay
21 contracts. The projected increase is in line with prior increases that have been levied by
22 Chester. The projected increase in rates results in pro forma costs of \$4,106,126,
23 resulting in an increase of \$347,348 above the level incurred in the Test Year. During the

1 pendency of the lawsuit Chester did not increase its rates. If the Special Master's report
2 is affirmed, AWC has every expectation that its rates from Chester will rise.. The
3 adjustment is shown on Schedule DLV-3B-5.

4 **Water Treatment Disposal Costs**

5 Q. PLEASE EXPLAIN THE ADJUSTMENT FOR WATER TREATMENT
6 DISPOSAL COSTS.

7 A. This adjustment reflects additional costs that will be incurred by AWC due to an increase
8 in costs charged by Artesian Wastewater Management, Inc. ("AWMI") to treat and
9 dispose of water at one of our water treatment facilities. AWMI, which bills on an EDU
10 or Equivalent Dwelling Unit basis, reviewed and reevaluated the EDUs of all industrial
11 facilities on its system. The reevaluation caused an increase in the number of EDUs
12 assigned to AWC and thereby caused a corresponding increase in the monthly cost to
13 treat water at AWC's water treatment facility. The revised EDUs assigned by AWMI
14 were approved by PSC Order No. 8301 in AWMI Docket No. 13-27WW. The
15 development of the adjustment is shown on Schedule DLV-3B-6.

16 **Tank Painting**

17 Q. PLEASE EXPLAIN THE ADJUSTMENT TO INCREASE TANK PAINTING
18 COSTS.

19 A. This adjustment annualizes the cost of tank painting that AWC anticipates will be
20 experienced during the Test Period based on contracts for services. The adjustment
21 recognizes expenses that will be incurred for storage tank painting, carbon tank painting
22 and cleaning, and inspection of the related facilities based on bids and contracts from

1 vendors that will be performing these services. The adjustment is shown on Schedule
2 DLV-3B-7.

3 **Llangollen Well Treatment**

4 Q. **PLEASE DISCUSS THE ADJUSTMENT RELATED TO LLANGOLLEN WELL**
5 **TREATMENT EXPENSES.**

6 A. This adjustment is necessitated by the need for a new treatment process at Llangollen,
7 where the Company is installing what is known as an advanced oxidation process
8 ("AOP"). The treatment process involves adding hydrogen peroxide (H2O2) to the water
9 and then treating it with ultraviolet ("UV") light. The process is designed to remove 1,4
10 dioxane, which our current treatment process will not remove. New equipment will be
11 installed in a separate building located near the existing treatment plant building. The
12 ongoing operational expenses for the new treatment process will entail increased
13 electricity costs, bulbs for UV reactors, and chemicals for the treatment process, which
14 AWC estimates will total \$120,657 per year. AWC witness C. Thomas deLorimier
15 discusses the need for the new well treatment process at Llangollen. The adjustment to
16 recognize costs associated with the new well treatment process for removing 1, 4 dioxane
17 at the Llangollen Wellfield is shown on Schedule DLV-3B-8.

18 **Information Technology Maintenance Costs**

19 Q. **PLEASE EXPLAIN THE ADJUSTMENT FOR INFORMATION TECHNOLOGY**
20 **COSTS.**

21 A. During the Test Year, the Company incurred \$793,851 in information technology support
22 costs for a variety of activities across the organization including items that support the
23 Company's computer systems and accounting systems. This adjustment annualizes costs

1 pursuant to existing contracts and reflects additional costs that will be incurred through
2 the conclusion of the Test Period to support operations. This adjustment is detailed on
3 Schedule DLV-3B-9.

4 **Insurance Costs**

5 Q. **PLEASE EXPLAIN THE ADJUSTMENT FOR INSURANCE COSTS.**

6 A. During the Test Year, the Company incurred \$538,492 for Property and Casualty,
7 Professional Liability and Automobile insurance. The instant adjustment annualizes the
8 Company's insurance costs for the Test period based on a conservative, projected 10
9 percent increase estimated by the Company's insurance vendors. The development of
10 this adjustment is shown on Schedule DLV-3B-10.

11 **Postage Costs**

12 Q. **PLEASE EXPLAIN THE ADJUSTMENT FOR POSTAGE COSTS.**

13 A. This adjustment reflects the additional postage costs that will be experienced during the
14 Test Period due to a 6 percent increase in postage rates approved by the U.S. Postal Rate
15 Commission. The development of this adjustment is shown on Schedule DLV-3B-11.

16 **Removal of Costs**

17 Q. **ARE THERE ADDITIONAL COSTS THAT NEED TO BE REMOVED FROM**
18 **OPERATIONS?**

19 A. Yes. The adjustment, shown on Schedule DLV-3B-12, removes certain costs that should
20 not be reflected in operating income for ratemaking purposes. The adjustment details
21 certain compensation costs, building costs, and certain costs that were misclassified. The
22 adjustment related to removal of costs related to pool operations was discussed earlier.

23 Q. **PLEASE DISCUSS THE REMOVAL OF COMPENSATION COSTS.**

1 A. During 2013, an award of \$49,973 was granted upon retirement to an employee for
2 meritorious service to the Company over many years. This award is non-recurring and
3 therefore removed for ratemaking purposes.

4 Q. **PLEASE EXPLAIN THE ADJUSTMENT TO REMOVE COSTS RELATED TO**
5 **AWC'S BUILDING.** A. This adjustment reflects an allocation of building costs to
6 affiliates of AWC for the use of AWC's administrative office facilities. The adjustment
7 reflects an allocation of property tax and depreciation for use of the noted assets and is
8 shown on Schedule DLV-3B-12.

9 Q. **PLEASE DISCUSS THE PORTION OF THE ADJUSTMENT TO REMOVE**
10 **MISCLASSIFIED COSTS.**

11 A. The Company has identified \$70 in costs that were booked to AWC but are more
12 appropriately assigned to an affiliate of AWC.

13 **Rate Case Expenses**

14 Q. **PLEASE EXPLAIN THE ADJUSTEMENT TO RECOVER RATE CASE COSTS.**

15 A. AWC estimates it will incur approximately \$1.1 million in costs on its own behalf and in
16 connection with experts retained by the Commission's Staff and the Division of the
17 Public Advocate ("DPA") relating to the litigation regarding AWC's request for rate
18 relief. The recommended adjustment amortizes the litigation costs for this proceeding
19 over a 24-month period and amortizes the costs a compensation study over a 60-month
20 period. The Company's costs relate to consultants retained for this proceeding, cost for
21 legal services from outside counsel, and administrative costs. The adjustment removes
22 the full amount of rate case expenses incurred during the Test Year of \$104,455 that were
23 included in Test Year operating results. The adjustment develops a recommended

1 expense level by amortizing the projected costs over amortization periods that have been
2 utilized and approved in several prior AWC rate applications. The recommended
3 adjustment is shown on Schedule DLV-3H.

4 **b. Depreciation Expenses**

5 Q. **PLEASE DESCRIBE THE ADJUSTMENT TO ANNUAL DEPRECIATION**
6 **EXPENSE FOR THE TEST YEAR.**

7 A. This adjustment to depreciation expense is based on the original cost of the utility plant,
8 which will be in service at the end of the Test Period at currently approved depreciation
9 rates. The adjustment to annualize depreciation increases operating expenses by
10 approximately \$1.2 million and is shown on Schedule DLV-3B-13.

11 **c. Property Taxes**

12 Q. **PLEASE EXPLAIN THE PRO FORMA ADJUSTMENT FOR PROPERTY**
13 **TAXES.**

14 A. This adjustment recognizes additional expenses that will be experienced by the Company
15 based on pro forma utility assessments from taxing authorities based on used and useful
16 utility plant/property that will be used to provide service to customers through the end of
17 the Test Period ending September 30, 2014. This adjustment annualizes property taxes
18 based on the latest assessments, but does not reflect potential increased assessments that
19 may be levied in 2014 from various taxing authorities. The development of the
20 recommended adjustment to property taxes is provided on Schedule DLV-3B-14.

21 **d. Payroll Taxes**

22 Q. **PLEASE EXPLAIN THE ADJUSTMENT FOR PAYROLL TAXES.**

1 A. This adjustment reflects increased Federal Insurance Contributions Act ("FICA"), state,
2 and federal unemployment taxes based on projected annual payroll. The adjustment is
3 presented in Schedule DLV-3C.

4 e. Income Tax

5 Q. **PLEASE EXPLAIN THE ADJUSTMENTS TO ACTUAL INCOME TAX**
6 **EXPENSE IDENTIFIED ON SCHEDULE DLV-3-2.**

7 A. The adjustments to the various income tax categories are made to reflect the pro forma
8 operating income. The computation of the pro forma expense for currently payable
9 federal income taxes and state income taxes (at prevailing rates) is shown on Schedule
10 DLV-3J. Schedule DLV-3K provides a calculation of pro forma deferred income taxes.

11 Q. **PLEASE EXPLAIN THE CALCULATION OF PRO FORMA INCOME TAXES.**

12 A. The computation of pro forma state income tax expense currently payable begins with
13 utility operating income before income taxes under present and proposed rates. Interest
14 expense is subtracted from utility operating income, based on the product of rate base and
15 the weighted average cost of debt. Following this deduction, various adjustments are
16 made to arrive at the income subject to Delaware state income taxes. These adjustments
17 eliminate book depreciation and replace it with tax depreciation for plant acquired prior
18 to 1974 and eliminate the amortization of investment tax credit for plant acquired prior to
19 1974, which is depreciated for book purposes but not for tax purposes.

20 The statutory state income tax rate of 8.7 percent is applied against Operating
21 Income subject to Delaware state income tax and results in total pro forma state income
22 tax expense under present and proposed rates for the Test Period. From total pro forma
23 state income tax expense, we deducted the pro forma deferred state income taxes to arrive
24 at pro forma state income tax expense currently payable at both present and proposed

1 rates. The state income tax currently payable as derived on Schedule 3J is used in the
2 development of Pro Forma Income shown on Schedule DLV-3-2.

3 Pro forma federal income tax expense is computed by applying the statutory
4 income tax rate of 34% for federal income taxes purposes. State income taxes are
5 deducted from taxable income subject to federal income taxes as are deferred income
6 taxes to arrive at pro forma federal income tax expense currently payable.

7 Q. **PLEASE EXPLAIN THE DEVELOPMENT OF PRO FORMA DEFERRED**
8 **INCOME TAXES.**

9 A. Pro Forma Deferred Income Taxes are calculated on the basis of the differences between
10 how items are recognized for book and tax purposes. Schedule DLV-3K shows the
11 development of pro forma deferred income taxes.

12 **f. Investment Tax Credits**

13 Q. **PLEASE EXPLAIN THE ADJUSTMENT FOR DEFERRED INCOME TAX**
14 **CREDITS.**

15 A. The Revenue Act of 1971 provides that as a condition for allowing the investment tax
16 credit, a public utility must treat investment tax credit property in one of several specified
17 manners for ratemaking purposes. The manner selected by AWC requires it to reduce its
18 rate base by its accumulated deferred investment tax credits and to restore the rate base
19 reduction "not less rapidly than ratably" over the book life of its investment tax credit
20 property without any cost-of-service effect. For financial statement purposes, AWC
21 treats the amortization of all investment tax credits as a credit to operating expenses,
22 regardless of the year in which the income tax credit was generated. Thus, for
23 ratemaking purposes, it is necessary to eliminate from operating expenses the

1 amortization actually recorded in the Test Year on investment tax credits. This prepared
2 adjustment is shown on Schedule DLV-3B-15.

3 Q. **REFERRING TO SCHEDULE DLV-3-2, PLEASE EXPLAIN THE AMOUNTS**
4 **SHOWN IN THE PRO FORMA COLUMN.**

5 A. The column identifies the level of additional revenues and concomitant expenses that will
6 increase pursuant to the level of rate relief requested by the Company. These adjustments
7 are made to show the utility operating income that will be realized during the Test Period
8 on an annualized basis under new rates proposed by the Company, based on the same
9 conditions reflected in the pro forma statement of income under present rates. Stated
10 differently, the adjustments from the present to the proposed rate reflect the increased
11 level of revenue the proposed rates would generate, including a corresponding adjustment
12 for finance charges, PSC fees, bad-debt expenses, and income taxes.

13 **3. Operating Income Summary**

14 Q. **PLEASE PROVIDE A SUMMARY OF AWC'S RECOMMENDED LEVEL OF**
15 **PRO FORMA OPERATING INCOME THAT SHOULD BE USED IN**
16 **ASSESSING THE NEED FOR RATE RELIEF.**

17 A. Based on the Test Period ending September 2014, AWC recommends that rate relief be
18 premised on pro forma operating income of \$12,631,899, the net of pro forma revenues
19 of \$64,297,489 less pro forma operating expenses of \$47,171,293 and pro forma income
20 taxes of \$4,494,297 .

21 **C. Rate of Return**

22 Q. **PLEASE DISCUSS AWC'S CURRENTLY AUTHORIZED RETURN.**

23 A. AWC's last rate proceeding, PSC Docket No. 11-207, was resolved through a negotiated
24 settlement among the parties. Issues related to AWC's overall rate of return and rate of

1 return on equity were resolved through settlement. In that proceeding, the parties agreed
2 to a 10.0 percent return on equity which translates to a 7.91 percent overall rate of return
3 when incorporated into AWC's capital structure from the last case.

4 Q. **WHAT OVERALL RATE OF RETURN HAS AWC ACTUALLY BEEN**
5 **ACHIEVING?**

6 A. AWC operations produced an overall rate of return 6.59 percent during the Test Year,
7 which is expected to decline to 5.70 percent by the end of the Test Period. The Company
8 has achieved earnings that are below the Company's implicitly authorized return of 7.91
9 percent and also below the 8.40 percent overall rate of return recommended by the
10 Company in this proceeding.

11 Q. **WHAT OVERALL RATE OF RETURN IS AWC REQUESTING IN THIS**
12 **PROCEEDING?**

13 A. The Company is requesting an overall rate of return of 8.40 percent. The development of
14 the overall rate of return reflects the balances of the Company's debt and equity resources
15 at the end of the Test Year, the embedded cost of debt, and the Company's recommended
16 cost of equity. The calculation of the Company's recommended overall rate of return is
17 shown on Schedule DLV-4.

18 Q. **WHAT RETURN ON EQUITY IS AWC REQUESTING IN THIS PROCEEDING?**

19 A. AWC requests that it be authorized to earn a return on equity of 10.90 percent. Similar to
20 other water utility companies, AWC is a highly capital-intensive company and, therefore,
21 must have an opportunity to earn a sufficient rate of return to attract the necessary capital
22 to accommodate significant construction projects for repair and rehabilitation, water
23 conservation, and a tightening of state and federal water quality standards. Not only does

1 the water industry maintain the highest multiple of nearly \$4 of investment for every \$1
2 revenue, compared to the multiple of \$1.47 for gas companies, but a continuing reduction
3 in customer consumption brought about by changing plumbing codes, environmental
4 efforts to conserve water and shrinking household size has spread historic infrastructure
5 costs across a constantly shrinking volumetric base. AWC witness Pauline Ahearn
6 provides complete support for the Company's equity return requirements in her direct
7 testimony.

8 **D. Revenue Requirement Summary**

9 Q. PLEASE SUMMARIZE AWC'S REVENUE REQUIREMENT IN THIS
10 PROCEEDING?

11 A. AWC recommends that it be allowed to implement revised rates, as proffered by AWC
12 witness John Gaustella, that afford the opportunity to collect an additional \$9,983,823 in
13 annual water revenues based on a pro forma rate base of \$221,767,586, pro forma
14 operating income of \$12,631,899 and an overall rate of return of 8.40 percent.

15 **E. Allowance for Funds Used During Construction**

16 Q. HAS THE COMPANY INCLUDED INFORMATION REQUIRED UNDER THE
17 MINIMUM FILING REQUIREMENTS REGARDING ALLOWANCE FOR
18 FUNDS USED DURING CONSTRUCTION?

19 A. Yes. Information pertaining to the rate applied by the Company for Allowance of Funds
20 Used During Construction ("AFUDC") is included in Schedule DLV-6.

1 **IV. PROPOSED CHANGES TO AWC'S RULES AND**
2 **REGULATIONS**

3 Q. **IS AWC REQUESTING AUTHORITY TO AMEND ITS TARIFF TO REFLECT**
4 **CHANGES TO RULES, REGULATIONS AND OR POLICIES CURRENTLY**
5 **USED IN OPERATIONS?**

6 A. Yes. AWC recommends a number of changes to existing rules, regulations and policies
7 that are set forth in the tariff. The Company's recommended tariff is included in DLV
8 Exhibit 2, attached to the testimony. A marked-up version (changes underlined) of the
9 tariff is provided as DLV Exhibit 2a and a clean version is provided as DLV Exhibit 2b.
10 The numbered paragraphs set forth below summarize changes recommended to the
11 Company's tariff pages:

- 12 1. Ninth Revised Sheet No. 2 - Metered Service. AWC has revised the language to
13 clarify the terms of metered service offered by the Company. The noted changes
14 do not constitute a change in the terms of metered service.
- 15 2. Twenty-Seventh Revised Sheet No. 3 - Customer Charge. The tariff sheet has
16 been updated to reflect new monthly rates consistent with rates recommended by
17 AWC witness John Gaustella.
- 18 3. Twenty-Seventh Revised Sheet No. 4 - Water Charge. The tariff sheet has been
19 updated to reflect new monthly rates consistent with rates recommended by AWC
20 witness John Gaustella.
- 21 4. Twenty-Seventh Revised Sheet No. 4 - Last Paragraph. The acronym "CCH" was
22 inserted after Christiana Care Hospital.

- 1 5. Original Sheet No. 4a - Public Fire Charges. The tariff sheet was updated to
2 reflect new monthly rates for public fire protection consistent with rates
3 recommended by AWC witness John Gaustella.
- 4 6. Thirty-Seventh Revised Sheet No. 5 – Private Fire Charges. The tariff sheet was
5 updated to reflect new monthly rates for private fire protection consistent with
6 rates recommended by AWC witness John Gaustella. The phrase “Private
7 Hydrant” was added in the rates table and a sentence was added to indicate that
8 the private hydrant charge is assessed monthly to each private hydrant.
- 9 7. Thirty-Seventh Revised Sheet No. 5 – Payment Terms. Inserted language herein
10 that unpaid bills are subject to late charges in accordance with Rule 46. The noted
11 language was formerly reflected on Sheet No. 19.
- 12 8. Twenty-Sixth Revised Sheet No. 6 – Temporary or Infrequent Service. The
13 language was updated to remove the quarterly option. In addition the charge for
14 said service has been revised in accordance with the rates proposed by AWC
15 witness John Gaustella.
- 16 9. Second Revised Sheet No. 6a – Turn on and Turn off Charges. Revised the title
17 of the section to Charges for Disconnection and Reconnection of Service. AWC
18 has adjusted its policies for service disconnections and reconnections to ensure
19 that work is performed only during regular business hours and to enforce the
20 requirement that the Company must receive confirmation of payment before a
21 service call occurs. The requirement for work to be performed during only
22 regular work hours is made for the safety of the Company’s workforce to remove
23 employees from the potential risks and dangers of doing residential and other field

1 work at night. The Company has redefined work performed during non-regular
2 business hours as Emergency Service and developed a charge consistent with
3 costs incurred by the Company to perform service outside of its regular working
4 hours. The higher charge is intended to provide an adequate incentive for
5 employees to accept on-call duty and to reasonably compensate them for
6 performing work during non-business hours. This charge for Emergency
7 Service work is \$140.

8 10. Fifth Revised Sheet No. 8 - Application for Service. The title has been updated.
9 Also, the provision's language was updated to reflect the requirement that a tenant
10 must show a valid form of identification. The section was further updated to note
11 that charges or deposits must be paid prior to initiation of service.

12 11. Fifth Revised Sheet No. 8 - Service Deposits. This section has been updated to
13 reflect AWC's policies on termination of deposits held by the Company.

14 12. Fifth Revised Sheet No. 8 - Billings and Changes in Ownership. This section was
15 updated to reflect the requirement that changes to bills must be communicated in
16 writing to the Company.

17 13. Sixth Revised Sheet No. 9 - Second Paragraph. This section has been revised to
18 reflect the requirement that when service to a tenant has been discontinued, the
19 owner of the unit will be responsible for ready to serve charges.

20 14. Sixth Revised Sheet No. 9 - Seasonal Reconnection Charge. The language has
21 been clarified to note that the customer is responsible for both the customer
22 charge and charge for fire protection. The section has been clarified to enforce

1 the requirement that this provision is offered only as a temporary deferral of
2 charges that otherwise would be due and payable on a monthly basis.

3 15. First Revised Sheet No. 9a - Security Deposits. The Company is increasing the
4 service deposit to \$200 for a tenant where the account is billed in the name of a
5 tenant. The Company has inserted language to note that deposits held by the
6 Company will be applied to the customer's remaining account balance.

7 16. Fifth Revised Sheet No. 10 - Company Mains and Service Lines. The section was
8 updated to indicate that the Company may institute domestic service by tapping
9 directly off of a fire service line.

10 17. Fifth Revised Sheet No. 11 - Cross Connection. This has been updated to reflect
11 that customers are responsible for the costs associated with disconnecting from
12 and reconnecting to the Company's system.

13 18. Fifth Revised Sheet No. 11 - Renewal of Service Line. This section has been
14 updated to reflect a requirement for meter pits.

15 19. First Revised Sheet No. 15 - Discontinuance of Service By Owner. The language
16 in this section has been updated to reflect rights and responsibilities of owners
17 relative to utility service when service is placed in the name of a tenant.

18 20. First Revised Sheet No. 15 - Discontinuance of Service By Company. This
19 section indicates that the Company is not liable to owners or occupants for
20 matters arising from discontinuance of service.

21 21. Fifth Revised Sheet No. 16 - Discontinuance With Notice. This section updates
22 the language in paragraph (c) to indicate that the Company can discontinue after
23 three consecutive estimated readings.

- 1 22. Fifth Revised Sheet No. 16 - Due to Emergency. This section updates the
2 language by removing the word customer and replacing it with the phrase owner
3 or occupants.
- 4 23. Fifth Revised Sheet No. 18 - Turn on and Shut off Without Authority. This
5 section was updated to advise that the customer shall not turn service on or off
6 without authority from the Company and that the customer turning service on or
7 off is considered tampering with Company facilities and can result in additional
8 fees and prosecution.
- 9 24. Fifth Revised No. 18 - Meters, Location. This section was updated to reflect
10 responsibilities for meters, meter pits and meter vaults.
- 11 25. Fourth Revised Sheet No. 19 - Registration. This section updates tariff language
12 regarding how the Company may estimate a customer's consumption when
13 consumption is not known.
- 14 26. Fifth Revised Sheet No. 19 - Last Paragraph. The noted language was moved to
15 Sheet No. 5.
- 16 27. Fifth Revised Sheet No. 20 - Periodic Meter Test. This section was updated to
17 change the word "thruput" to "throughput".
- 18 28. Ninth Revised Sheet No. 21 - Hydrant Location. This section has been eliminated
19 due to the requirements of PSC Docket No. 15.
- 20 29. Ninth Revised Sheet No. 21 - Responsibility for Service. Paragraph 42 was
21 updated to reflect revised language regarding liability for fire protection and that
22 the Company cannot be held liable for main breaks or water leaks beyond the
23 control of the Company.

- 1 30. First Revised Sheet No. 21a - Place of Payment. The language has been updated
2 to reflect how bills for water service can be paid.
- 3 31. Sixth Revised Sheet No. 22 - Customer Refunds. The language has been updated
4 to indicate that the Company may not mail checks for refunds that are less than
5 \$10.
- 6 32. Ninth-Second Supplemental Sheet - Middletown. The tariff sheet has been
7 updated to reflect new monthly rates consistent with rates recommended by AWC
8 witness John Gaustella.
- 9 33. Eleventh-Third Supplemental Sheet - Delaware Correctional Center. The tariff
10 sheet has been updated to reflect new monthly rates consistent with rates
11 recommended by AWC witness John Gaustella.
- 12 34. First-Sixth Supplemental Sheet - Town of Clayton. A tariff sheet has been
13 developed to reflect monthly rates for water service in accordance with an
14 agreement between AWC and the Town of Clayton.
- 15 35. First-Seventh Supplemental Sheet - City of New Castle. A tariff has been
16 developed to reflect monthly rates for water service in accordance with an
17 agreement between AWC and the City of New Castle.

18 Q. **Does this conclude your testimony at this time?**

19 A. Yes, it does.